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PATENT IOS9601CIPD

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

D'Ausilio, et al.

Serial No.:

10/779,869

Group Art Unit:

Examiner:

3643

Swiatek, Robert P.

Title:

In Orbit Space Transportation

& Recovery System

Filed:

17 February 2004

#### CERTIFICATE OF MAILING UNDER 37 C.F.R. SECTION 1.8

The undersigned hereby certifies that this document is being deposited with the United States Postal Service in accordance with the provisions of 37 CFR Section 1.8 on the date indicated below and is addressed to The Commissioner for Patents, Mail Stop Non-Fee Amendment, P.O. Box 1470, Alexandria, Virginia 22313-1450.

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Thomas N. Giaccherini, Registration No. 31,075

2005

### SECOND DISCLOSURE STATEMENT

The Commissioner for Patents Mail Stop Non-Fee Amendment P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

The Applicants submit this Second Disclosure Statement in accordance with 37 CFR Sections 1.56, 1.97 and 1.98 to disclose the results of an International Search Report that was issued by the European Patent Office for a corresponding PCT International Patent Application No. PCT/GB2004/000378 on 22 October 2004. A copy of the EPO ISR is attached. A completed PTO Form-SB/08A&B accompanies this Second Disclosure Statement.

### **DISCLOSURE DOCUMENTS**

Document 2A

Martin- Nuclear Electric Propulsion of Spacecraft describes the use of space nuclear power supplies to provide electrical power.

Document 2B

Jaffe- Nuclear-Electric Reusable Orbital Transfer Vehicle describes the system requirements for a 300-kWe space nuclear reactor system.

Document 2C

Lenard- Nuclear Electric Propulsion for Enhanced Mars Sample Return Missions describes the user of a nuclear electric propulsion vehicle to retrieve soil samples from Mars.

Document 2D

Schall- Laser Radiation for Cleaning Space Debris from Lower Earth Orbits describes the use of high power laser radiation to mitigate the threat of collisions of a space station with orbital debris.

### Document 2E

El-Genk- Space Nuclear Power Systems

A Power Propulsion System Based on a Second-Generation Thermionic NPS of the "Topaz" Type

describes power propulsion systems- universal space platforms.

## Document 2F

Bruno- Building Roadmaps for Space Transportation of the XXIst Century describes presentations in a nuclear propulsion workshop.

### Document 2G

Minovitch- Self-Refueling Space Propulsion System and Operating Method describes a propulsion system for reusable space-based vehicles.

### Document 2H

Deininger- Arcjet Propulsion System for an SP-100 Flight Experiment describes an arcjet nuclear electric propulsion spacecraft.

### Document 2I

Ageev- Spacecraft Combined Electro-Reactive Drive Unit describes a nuclear power plant with radiation protection, a refrigerator-radiator and a heat screen.

## Document 2J

Shepherd- Performance Criteria of Nuclear Space Propulsion Systems describes the development of advanced nuclear propulsion systems.

## Document 2K

Loeb- A Nuclear-Electric Propulsion Module for Advanced Solar System Exploration Programs

describes nuclear-electric propulsion for space exploration.

#### **CONCLUSION**

The Applicants submit that none of the documents described above disclose the Invention as claimed in the Present Patent Application as revised by the First Preliminary Amendment submitted by the Applicants. A First Office Action has not yet issued for the Present Application. In accordance with 37 CRF Section 1.97(b)(3), the Applicants believe that no fee is required to submit this Disclosure Statement.

Respectfully gubmitted,

Thomas N. Giaccherini,

Applicants' Attorney

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Transmitted to the United States Patent Office by First Class Mail on 14 July 2005 with a Rule 8 Certificate.

Sheet One

PTO/SB/08A (07-05)

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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

of Two

Complete if Known **Application Number** 10/779,869 Filing Date 17 February 2004 First Named Inventor D'Ausilio Art Unit 3643 **Examiner Name** Swiatek Attorney Docket Number IOS9601CIPD

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.	Document Number  Number-Kind Code <sup>2 (d known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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FOREIGN PATENT DOCUMENTS								
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Examiner		Date	
Signature		Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>8</sup>Applicant is to place a check mark here if English language

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STATEMENT BY APPLICANT				First Named Inventor	D'Ausilio	
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(Use as many sheets as necessary)				Examiner Name	Swiatek	
Sheet	Two	of	Two	Attorney Docket Number	IOS9601CIPD	

Examiner	Cite	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of	
Initials*	No.1	the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	2A .	MARTIN Nuclear Electric Propulsion of Spacecraft	
	2В	JAFFE Nuclear-Electric Reusable	
	2C	LENARD Nuclear Electric Propulsion for Enhanced Mars Sample Return Missions	
	20	SCHALL Laser Radiation for Cleaning Space Debris	
	2E	EL-GENK Space Nuclear Power Systems	
	2F	BRUNO Building Roadmaps	
	2H	DEININGER Arcjet Propulsion	
	2J	SHEPHERD Performance Criteria	
	2K	LOEB A Nuclear-Electric Propulsion Module for Advance Solar System Exploration	

Examiner	Date	
Signature	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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